EXHIBIT 1

1. A cholesteric layered material comprising at least one three-dimensionally crosslinked, aligned cholesteric layer, wherein the crosslinked cholesteric layer(s) does (do) not exhibit any color shift which can be induced by external stimuli.

2. [A] The cholesteric layered material as claimed in claim 1, wherein the external stimuli are selected from changes in the temperature of the layered material, in particular warming,

the action of diluents on the layered material, and combinations thereof.

3. [A] The cholesteric layered material as claimed in claim 2, which exhibits no color shift on

a) a change in the temperature in the range from -30°C to 250°C;

b) warming to temperatures in the range from 80 to 160°C with simultaneous exposure to a diluent; and/or

c) treatment for 15 minutes at 80°C in xylene followed by drying.

4. [A] The cholesteric layered material as claimed in [one of the preceding claims] claim 1, wherein the reflection maximum of the cholesteric layer after the xylene treatment can be shifted by not more than about 10 nm into the higher or lower wavelength region.

5. [A] The cholesteric layered material as claimed in [one of the preceding claims] claim 1, wherein the cholesteric layer has a mean dry layer thickness of less than about 5 μm[, in particular less than about 2 μm, preferably less than or equal to about 1 μm].

6. [A] The cholesteric layered material as claimed in [one of the preceding claims] claim 1, wherein the cholesteric layer has a mean dry layer thickness of at least one pitch height.

7. [A] The cholesteric layered material as claimed in [one of the preceding claims] claim 1, which comprises a plurality of color shift-stable cholesteric layers of identical or different thickness and identical or different chemical composition.

8. A cholesteric pigment comprising at least one crosslinked, aligned cholesteric layer having a mean particle size in the range from 5 to 50 μm and a thickness of from 0.2 to 5 μm, wherein the crosslinked cholesteric layer(s) exhibits (exhibit) no visually evident color shift.

9. A process for the production of a cholesteric layered material as claimed in claim 1, which comprises:

a) casting and simultaneous alignment of a cholesteric coating composition comprising at least one crosslinkable substance onto a support with formation of a first cholesteric layer, where the support is essentially chemically inert to the cholesteric layer to be applied;

b) drying and crosslinking of the applied layer, where the conditions are selected in such a way that the resultant layer exhibits no visually evident color shift;

c) removal of the layered material from the support after one or more further aligned cholesteric layers have, if desired, been applied to the layer obtained in accordance with step a).

10. [A] The process as claimed in claim 9, wherein a support is employed which does not adversely affect the alignment of the cholesteric layer cast thereon during drying and curing.

11. [A] The process as claimed in [one of claims 9 and 10] claim 9, wherein the support has an adhesive strength of less than about 1 cN to the dried and crosslinked first cholesteric layer cast thereon.

12. [A] The process as claimed in [one of claims 9 to 11] claim 9, wherein a layered material comprising a plurality of cholesteric layers is produced, where the second layer can be removed selectively from the first layer on the support as a composite with any further layers.

13. [A] The process as claimed in [one of claims 9 to 12] claim 9, wherein the support is selected from the group consisting of a plastic support, a metal support, a glass support, and a ceramic support [supports].

14. [A] The process as claimed in claim 13, wherein the plastic support comprises a release layer of crosslinked, [preferably] optionally aligned, cholesteric material onto which the first cholesteric layer is cast.

15. [A] The process as claimed in claim 14, wherein the adhesion between the plastic support and the release layer is at least about twice the adhesion between release layer and first cholesteric layer.

16. [A] Theprocess as claimed in [one of claims 9 to 15] claim 9, wherein the coating compositions for the cholesteric layer(s) and the release layer independently of one another have a viscosity in the range from about 1 to 50 mPas, and the coating rate is in the range from about 1 to 800 m/min.

17. [A] The process as claimed in [one of claims 9 to 16] claim 9, wherein the crosslinking of the cholesteric layer(s) and of any cholesteric release layer present is carried out by electron beams or UV radiation with simultaneous warming of the layer 25 to be cured, where the emitter power is in the range from about 50 to 200 watts/cm.

18. [A] The process as claimed in claim 17, wherein the layer temperature during the radiation curing is at least 60°C[, in particular at least 80°C, preferably at least 90°C].

19. [A] The process as claimed in claim 9 [one of claims 9 to 18], wherein a further support film is applied to the cholesteric layer applied last, and the one or more cholesteric layer(s) is (are) removed from the support as a composite.

20. [A] The process as claimed in claim 9 [one of claims 9 to 18], wherein one or more cholesteric layer(s) is (are) removed from the support by blasting with compressed air, a water jet, steam or with the aid of a knife coater and ground to give pigments.

21. A composition comprising at least one cholesteric pigment as claimed in claim 8 and one or more additional components.

Claims 22 and 23 (Cancelled).

24. A polarizer comprising a layered material as claimed in [one of claims 1 to 7] claim 1, which is, optionally, [, if desired] applied to a support film.

25. A broad-band polarizer comprising a layered material as claimed in claim 1 [one of claims 1 to 7] having a number of from 3 to 20 cholesteric layers with reflection maxima matched to one another, where the polarizer has a total thickness [()without support film[)] in the range from about 2 to 50 μm.

26. The cholesteric layered material as claimed in claim 4, wherein the cholesteric layer has a mean dry layer thickness of less than about 2 μm.

27. The cholesteric layered material as claimed in claim 4, wherein the cholesteric layer has a mean dry layer thickness of less than or equal to about 1 μm.

28. The process as claimed in claim 18, wherein the layer temperature during radiation curing is at least 80°C.

29. The process as claimed in claim 18, wherein the layer temperature during radiation curing is at least 90°C.

30. A method of making an article comprising incorporating the cholesteric layered material as claimed in claim 1 into and/or onto the article.

31. The method as claimed in claim 30, wherein the article is selected from the group consisting of a motor vehicle, a motor vehicle accessory, a computer, a leisure article, a sport article, a toy article, an optical article, a cosmetic article, a textile article, a leather article, a jewelry article, a writing article, a spectacle frame, a construction article, a print article, and a paint article.

32. The method as claimed in claim 31, wherein the article is a motor vehicle and the cholesteric layered material is painted onto the motor vehicle.

33. A method of making an article comprising incorporating the composition as claimed in claim 8 into and/or onto the article.

34. The method as claimed in claim 32, wherein the article is selected from the group consisting of a motor vehicle, a motor vehicle accessory, a computer, a leisure article, a sport article, a toy article, an optical article, a cosmetic article, a textile article, a leather article, a jewelry article, a writing article, a spectacle frame, a construction article, a print article, and a paint article.

35. The method as claimed in claim 34, wherein the article is a motor vehicle and the cholesteric layered material is painted onto the motor vehicle.